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UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Administration  
Bureau of Agricultural and Industrial Chemistry

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QUARTERLY

NAVAL STORES REPORT

on

Production, Distribution, Consumption and Stocks

of

TURPENTINE AND ROSIN

of the

UNITED STATES

By Crop Years

Covering Quarter - April 1 - June 30, 1943

Issued August 23, 1943

Compiled by

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Naval Stores Research Division

## FOREWARD

In addition to its regular Annual and Semi-Annual Naval Stores Reports on production, consumption and stocks of naval stores, the Naval Stores Research Division has, at the request of some of the War Agencies, begun the issuance of Quarterly reports. The issuance of these reports is authorized under Federal Act 278, which directs the Secretary of Agriculture to collect, compile and publish statistics and essential information relating to spirits of turpentine and rosin produced, held and used in the domestic and foreign commerce of the United States.

If production figures for this period are used as a basis for estimating this season's probable production, the fact that gum naval stores production is seasonal should be borne in mind. Wood naval stores production, on the other hand, is not seasonal but is based largely upon probable consumer demand and to some degree upon labor.

Carryover (stocks) of turpentine and rosin is separated into gum and wood products. Stocks of wood rosin do not include so-called "B wood rosin." While sulphate wood turpentine is carried in the regular production and carryover tables, data on "liquid rosin" or "tall oil" are in a table separate from gum and wood rosins. Pending the selection of a proper term, we continue to refer to the mixture of resin and fatty acids recovered from the acidulated soap curds obtained in the production of sulphate pulp as "liquid rosin." The term "sulphate wood rosin" refers to the resin acids constituting approximately 42 percent of "liquid rosin."

The data on production, consumption and stocks are expressed in commercial units: For turpentine -- barrels of 50 gage gallons; and for rosin -- barrels of approximately 500 pounds gross weight. A unit of naval stores consists of one barrel of turpentine and three and one-third barrels of rosin. Carryover figures do not include gum turpentine or rosin producible from crude gum on hand.

Statistics on exports and imports of turpentine and rosin are not included in this issue.

These reports are designed to be of use to the industry -- producer, factor, distributor and consumer. Every effort is made to obtain complete and accurate information but the completeness, accuracy and promptness of issue depend upon the cooperation of those reporting. In accepting the statistics given in this report, as well as those in previous reports, it should be borne in mind that the Bureau of Agricultural and Industrial Chemistry merely assembles the figures from the individual reports received and is not responsible for their accuracy.

The Bureau of Agricultural and Industrial Chemistry extends its thanks to those producers, factors, distributors and consumers who have so kindly cooperated in furnishing the requested information. The advice and assistance of C. F. Speh, formerly Chief of the Naval Stores Research Division, in compiling this report is gratefully acknowledged.

SUMMARY OF TURPENTINE

SUPPLY, DISTRIBUTION AND CARRYOVER (Bbls. 50 gals.)

	<u>1943-44</u>		<u>1942-43</u>	
	<u>3 mos. (Apr. - June)</u>		<u>12 mos. (Apr. - Mar.)</u>	
	<u>Total</u>	<u>Gum</u>	<u>Wood</u>	<u>Total</u>

TABLE 1a - SUPPLY AND DISTRIBUTION

U. S. Carryover

April 1 <u>1/</u>	288,213	213,285	74,928	156,369	86,448	69,921
Production <u>2/</u>	143,917	85,996	57,921	560,351	321,930	238,421
Imports	-- not available --			-- not available --		

Available Supply	432,130	299,281	132,849	716,720	408,378	308,342
Less Carryover						
June 30 <u>1/</u>	280,730	225,725	55,005	*288,213	213,285	74,928

Appar. Total

Consumption	151,400	73,556	77,844	428,507	195,093	233,414
Less Exports	-- not available --			-- not available --		

Appar. U. S.

Consumption	-- not available --			-- not available --		
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TABLE 2a - CARRYOVER (Stocks)

U. S. Carryover

April 1	288,213	213,285	74,928	156,369	86,448	69,921
U. S. Carryover						
June 30	280,730	225,725	55,005	*288,213	213,285	74,928

Increase

Increase	---	12,440	---	131,844	126,837	5,007
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Decrease

Decrease	7,483	---	19,923	---	---	---
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1/ Tables 3a and 4a

2/ Table 5a

\* Carryover March 31, 1943

SUMMARY OF ROSINSUPPLY, DISTRIBUTION AND CARRYOVER (Bbls. 500 lbs. gross)

	<u>1943-44</u> 3 mos. (Apr. - June)		<u>1942-43</u> 12 mos. (Apr. - Mar.)			
	<u>Total</u>	<u>Gum</u>	<u>Wood</u>	<u>Total</u>	<u>Gum</u>	<u>Wood</u>

TABLE 1b - SUPPLY AND DISTRIBUTION

## U. S. Carryover

April 1 <u>1/</u>	1,605,286	1,324,796	280,490	1,434,677	1,230,817	203,860
Production <u>2/</u>	515,812	289,385	226,427	2,069,754	1,085,873	983,881
Imports	-- not available --			-- not available --		

Available Supply	2,121,098	1,614,181	506,917	3,504,431	2,316,690	1,187,741
Less Carryover						

June 30 <u>1/</u>	<u>1,502,178</u>	<u>1,279,686</u>	<u>222,492</u>	<u>*1,605,286</u>	<u>1,324,796</u>	<u>280,490</u>
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## Appar. Total

Consumption	618,920	334,495	284,425	1,899,145	991,894	907,251
Less Exports	-- not available --			-- not available --		

## Appar. U. S.

Consumption	-- not available			-- not available		
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TABLE 2b - CARRYOVER (Stocks)

## U. S. Carryover

April 1	1,605,286	1,324,796	280,490	1,434,677	1,230,817	203,860
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## U. S. Carryover

June 30	<u>1,502,178</u>	<u>1,279,686</u>	<u>222,492</u>	<u>*1,605,286</u>	<u>1,324,796</u>	<u>280,490</u>
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## Increase

	---	---	---	170,609	93,979	76,630
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## Decrease

	103,108	45,110	57,998	---	---	---
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1/ Tables 3b and 4b2/ Table 5b. Includes reclaimed rosin.

\* Carryover March 31, 1943.

3

DETAILS AND SUMMARY OF TURPENTINE CARRYOVER (Bbls. 50 gals.)

1943  
June 30

1943  
Mar. 31

	Total	Gum	Wood	Total	Gum	Wood
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TABLE 3a - DETAILS OF TURPENTINE CARRYOVER

Production Points

Gum Stills 1/	27,786	27,786	---	33,118	33,118	---
Wood Plants 1/						
Steam Dist. 2/	14,695	---	14,695	33,498	---	33,498
Sulphate	12,992	---	12,992	11,526	---	11,526
Dest. Dist.	231	---	231	251	---	251
Total	55,704	27,786	27,918	78,393	33,118	45,275

So. Concent. Points

Ports 3/	81,712	81,712	---	61,691	61,691	---
Interior Yards	94,869	94,869	---	90,979	90,979	---
Total	176,581	176,581	---	152,670	152,670	---

Distrib. Points

Eastern	12,395	4,471	7,924	14,001	4,833	9,168
Central	15,874	7,804	8,070	22,776	13,480	9,296
Western	4,177	1,490	2,687	6,217	3,628	2,589
Total 4/	32,446	13,765	18,681	42,994	21,941	21,053

Industrial Plants 5/	15,999	7,593	8,406	14,156	5,556	8,600
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TABLE 4a - SUMMARY OF TURPENTINE CARRYOVER

Production Points	55,704	27,786	27,918	78,393	33,118	45,275
So. Concent. Points	176,581	176,581	---	152,670	152,670	---
Distrib. Points	32,446	13,765	18,681	42,994	21,941	21,053
Industrial Plants	15,999	7,593	8,406	14,156	5,556	8,600
Total in U. S.	280,730	225,725	55,005	288,213	213,285	74,928

1/ Compiled from reports by producers and factors.

2/ Does not include by-products resulting from making paler grades from FF wood rosin.

3/ Official Board of Trade and Chamber of Commerce Reports.

4/ Compiled from reports of individual distributors.

5/ Compiled from reports of individual consumers.

DETAILS AND SUMMARY OF ROSIN CARRYOVER (Bbls. 500 lbs. gross)

1943  
June 30

1943  
Mar. 31

	<u>Total</u>	<u>Gum</u>	<u>Wood</u>		<u>Total</u>	<u>Gum</u>	<u>Wood</u>
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TABLE 3b - DETAILS OF ROSIN CARRYOVER (Stocks)

Production Points

Gum Stills 1/	125,893	125,893	---	112,247	112,247	---
Wood Plants 1/						
Steam Dist. 2/	123,272	---	123,272	169,689	---	169,689
Sulphate	---	---	---	---	---	---
Dest. Dist.	---	---	---	---	---	---
Total	249,165	125,893	123,272	281,936	112,247	169,689

So. Concent. Points

Ports 3/	341,806	341,806	---	359,460	359,460	---
Interior Yards	571,591	571,591	---	590,065	590,065	---
Total	913,397	913,397	---	949,525	949,525	---

Distrib. Points

Eastern	11,609	5,096	6,513	9,341	5,305	4,036
Central	8,452	4,011	4,441	8,664	4,646	4,018
Western	1,587	140	1,447	1,647	180	1,467
Total 4/	21,648	9,247	12,401	19,652	10,131	9,521

Industrial Plants 5/	317,968	231,149	86,819	354,173	252,893	101,280
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TABLE 4b - SUMMARY OF ROSIN CARRYOVER (Stocks)

Production Points	249,165	125,893	123,272	281,936	112,247	169,689
So. Concent. Points	913,397	913,397	---	949,525	949,525	---
Distrib. Points	21,648	9,247	12,401	19,652	10,131	9,521
Industrial Plants	317,968	231,149	86,819	354,173	252,893	101,280
Total in U. S.	1,502,178	1,279,686	222,492	1,605,286	1,324,796	280,490

1/ Compiled from reports by producers and factors.

2/ Does not include by-products resulting from making paler grades from FF wood rosin.

3/ Official Board of Trade and Chamber of Commerce Reports.

4/ Compiled from reports of individual distributors.

5/ Compiled from reports of individual consumers.

DETAILS OF PRODUCTION

1943-44  
3 mos. (Apr. - June)

1942-43  
12 mos. (Apr. - Mar.)

Total    Gum    Wood

Total    Gum    Wood

TABLE 5a - PRODUCTION OF TURPENTINE (Bbls. 50 gals.)

	<u>Gum</u>	<u>Wood</u>		<u>Total</u>	<u>Gum</u>	<u>Wood</u>
Gum	85,996	85,996	---	321,930	321,930	---
Wood						
Steam Dist.	33,433	---	33,433	148,166	---	148,166
Sulphate	23,393	---	23,393	84,484	---	84,484
Dest. Dist.	1,095	---	1,095	5,771	---	5,771
Total	143,917	85,996	57,921	560,351	321,930	238,421

TABLE 5b - PRODUCTION OF ROSIN (Bbls. 500 lbs. gross)

	<u>Gum</u>	<u>Reclaimed gum</u>	<u>Wood</u>	<u>Total</u>	<u>Gum</u>	<u>Reclaimed gum</u>	<u>Wood</u>
Gum	286,249	286,249	---	1,071,752	1,071,752	---	---
Reclaimed gum	3,136	3,136	---	14,121	14,121	---	---
Wood							
Steam Dist.	226,427	---	226,427	983,881	---	983,881	---
Sulphate	---	---	---	---	---	---	---
Dest. Dist.	---	---	---	---	---	---	---
Total	515,812	289,385	226,427	2,069,754	1,085,873	983,881	983,881

TABLE 5c - PRODUCTION OF "SULPHATE WOOD ROSIN (TALL OIL)"

1943-44  
Apr. - June

36,458 tons black liquor soap  
13,483 tons liquid rosin

1942-43  
Apr. - Mar.

95,562 tons black liquor soap  
39,442 tons liquid rosin

TABLE 6 - PRODUCTION OF GUM TURPENTINE BY STATES

	1943-44		1942-43	
	3 mos. (Apr. - June)		12 mos. (Apr. - Mar.)	
	Barrels	Percentage	Barrels	Percentage
South Carolina	1,288	1.50	3,969	1.24
Georgia	58,848	68.43	223,393	69.40
Florida	19,378	22.53	69,018	21.44
Alabama	5,160	6.00	20,014	6.21
Mississippi	948	1.10	8,4520	1.40
Louisiana	374	.44	1,016	.31
Total	85,996	100.00	321,930	100.00

TABLE 7 - MISCELLANEOUS NAVAL STORES (Bbls. 50 gals.)

	1943-44		1942-43	
	3 mos. (Apr. - June)		12 mos. (Apr. - Mar.)	
	Production	Stocks	Production	Stocks
Pine Oil	26,822	13,095	120,001	18,829
Pine Tar	25,191	1,186	104,922	2,554
Dipentene	5,741	11,480	24,547	18,456
Monocyclic hydrocarbons (other than dipentene)	11,192	9,883	35,936	10,658

TABLE 8a - REPORTED CONSUMPTION OF TURPENTINE IN UNITED STATES (Bbls. - 50 gals.)

	1943-44			1942-43		
	3 mos.	(Apr. - June)		12 mos.	(Apr. - Mar.)	
	Total	Gum 1/	Wood 1/	Total	Gum 1/	Wood 1/
Abattoirs	0			0		
Adhesives and plastics	109			591		
Asphaltic products	0			0		
Automobiles and wagons	89			355		
Chemicals and pharmaceuticals	18,196			*54,530		
Ester gum and synthetic resins	4,456			358		
Foundries and f'dry supplies	180			1,012		
Furniture	91			345		
Insecticides & disinfectants	9			192		
Linoleum and floor covering	7			32		
Matches	0			0		
Oils and greases	32			27		
Paint, varnish and lacquer	6,700			28,326		
Paper and paper size	0			0		
Printing ink	63			201		
Railroads and shipyards	2,150			8,772		
Rubber	54			106		
Shoe polish and shoe materials	3,580			10,322		
Soap	0			0		
Other industries	44			192		
Total industrial reported	35,760	16,488	19,272	105,363	43,212	62,151
Not accounted for 2/		-- not available --			-- not available --	
Apparent U. S. Consumption 3/		-- not available --			-- not available --	

1/ Separation of gum and wood turpentine consumption is limited to the total reported.

2/ Principally unreported distribution of turpentine through retailers who sell in small quantities to ultimate consumers.

3/ From Table 1a, page 1.

\* Revised from 1942-43 Annual Report

TABLE 8b - REPORTED CONSUMPTION OF ROSIN IN UNITED STATES (Bbls. - 500 lbs.)

	1943-44			1942-43		
	3 mos. (Apr. - June)	Gum 1/	Wood 1/	Total	Gum 1/	Wood
Total			Total			
Abattoirs	289			441		
Adhesives and plastics	5,594			17,195		
Asphaltic products	521			3,014		
Automobiles and wagons	79			79		
Chemicals and pharmaceuticals	68,942			258,765		
Ester gum and synthetic resins	38,673			185,329		
Foundries and F'dry supplies	6,659			11,553		
Furniture	7			8		
Insecticides and disinfectants	1,742			5,704		
Linoleum and floor covering	4,700			40,931		
Matches	400			1,250		
Oils and greases	9,970			63,672		
Paint, varnish and lacquer	39,167			164,119		
Paper and paper size	110,165			367,021		
Printing	4,589			19,217		
Railroads and shipyards	3,096			6,823		
Rubber	828			6,602		
Shoe polish and shoe materials	2,241			9,509		
Soap	58,265			238,658		
Other industries	1,721			11,192		
Total industrial reported	357,648	184,837	172,811	1,411,082	691,914	719,16
Not accounted for 2/		-- not available --			-- not available --	
Apparent U. S. Consumption 3/		-- not available --			-- not available --	

1/ Separation of gum and wood consumption is limited to the total reported.

2/ Principally unreported industrial consumption of rosin and rosin for distribution through retailers who sell in small quantities to ultimate consumers.

3/ From Table 1b, page 2.

ADDENDA

Additional information pertaining to naval stores may be obtained as follows:

For periods prior to 1942, for monthly, quarterly and annual reports on imports and exports of turpentine and rosin, address: Foreign Trade Statistics, Bureau of the Census, Department of Commerce, Washington, D. C. Price ten cents per copy.

For biennial census of the production of turpentine and rosin, address: Bureau of the Census, Department of Commerce, Washington, D. C.

For information on the southern forest survey showing turpentine timber resources, address: Southern Forest Experiment Station, New Orleans, Louisiana.

For information regarding the production, distribution, consumption and stocks of turpentine and rosin, address: Naval Stores Research Division, Southern Regional Research Laboratory, 2100 Robert E. Lee Boulevard, New Orleans 19, Louisiana.

